# AUTHOR INDEX

Page numbers in italics indicate biographic notes about the authors concerned.

Adewoye, O. O., 75
Almond, E. A., 101, *123*

Biswas, S. K., 61, *123*
Bolton, P. J., 199
Bredell, L. J., 161, *251*
Buckley, D. H., 253, *391*

Chang, Y. J., 175, *251*
Clayton, P., 199, 221, 233, *251*

Danks, D., 233, *251*
Davies, J. E., 387, *391*

Eliezer, Z., 117, *123*

Fu, S.-B., 305, *391*

Gawne, D. T., 125, *251*
Gee, M. G., 101, *123*
Gondo, S., 51
Grigorescu, I. C., 383, *391*

Hammarsten, Å., 81, *123*
He, Z.-M., 305, *391*
Herold-Schmidt, U., 151, *251*
Hinsberger, R., 151, *251*
Hisakado, T., 337, *391*
Hogmark, S., 81, *123*

Jiang, Q.-C., 305, *391*
Johnson, L. B., Jr., 161, *251*

Kamakura, T., 51
Krause, H., 353, *391*
Krishnamurthy, S., 289, *392*
Konishi, M., 51
Kuhlmann-Wilsdorf, D., 161, 175, *252*
Kumehara, H., 337, *392*

Lhymn, C., 1
Lira-Olivares, J., 383, *392*

Ma, U., 125, *252*
Mori, M., 337, *392*

O'Callaghan, P. W., 29, *124*
Owen, K. C., 117

Pavelescu, D., 321, *392*
Pell, G. M., 199
Persad, C., 117
Pramila Bai, B. N., 61, *124*
Probert, S. D., 29, *124*

Quinn, M. J., 369

Rao, A. R., 289, *392*
Rao, P. V., 253, *392*

Sawley, K. J., 199
Scholl, M., 221, *252*
Schroelkamp, C., 353, *393*
Suda, H., 337, *393*

Tudor, A., 321, *393*

Wang, M. J., 117

Xie, J.-P., 305

Yamamoto, Y., 51

© Elsevier Sequoia/Printed in The Netherlands

# SUBJECT INDEX

Abrasion
abrasive wear resistance of anisotropic two-phase Fe–Ni–C steels, 151
Adhesion
a case of wear particle formation through shearing-off at contact spots interlocked through micro-roughness in adhesive wear, 175
Alloys
characterization of dry sliding wear of Al–Si alloys, 61
Aluminium
characterization of dry sliding wear of Al–Si alloys, 61
Asperities
analyses of wear rate due to micro-asperities and transferred particles on hard asperities, 337

Carbon
abrasive wear resistance of anisotropic two-phase Fe–Ni–C steels, 151
Cavitation erosion
unified empirical relations for cavitation and liquid impingement erosion processes, 253
Composites
effect of normal load on the specific wear rate of fibrous composites, 1
preparation and tribological evaluation of Cu–graphite composites by high energy high rate powder consolidation, 117
Coatings
wear mechanisms in electroless Ni coatings, 125
Contact resistance
teaming measurement of the coefficient of friction and of contact resistance as a tool for the investigation of sliding interfaces, 161
Contacts
a case of wear particle formation through shearing-off at contact spots interlocked through micro-roughness in adhesive wear, 175
prediction and measurement of true areas of contact between solids, 29
Copper
preparation and tribological evaluation of Cu–graphite composites by high energy high rate powder consolidation, 117
Crystallography
effect of indenter shape and surface crystallographic orientation on frictional plastic flow and fracture in α-SiC, 75

Dry friction
influence of non-metallic inclusions on the wear behaviour of ferrous materials in nominally dry friction systems, 353

Erosion
unified empirical relations for cavitation and liquid impingement erosion processes, 253

Fibres
effect of normal load on the specific wear rate of fibrous composites, 1
Flow
effect of indenter shape and surface crystallographic orientation on frictional plastic flow and fracture in α-SiC, 75
Fracture
effect of indenter shape and surface crystallographic orientation on frictional plastic flow and fracture in α-SiC, 75
Friction
effect of indenter shape and surface crystallographic orientation on frictional plastic flow and fracture in α-SiC, 75
influence of non-metallic inclusions on the wear behaviour of ferrous materials in nominally dry friction systems, 353
the sliding friction coefficient — its evolution and usefulness, 321
teaming measurement of the coefficient of friction and of contact resistance as a tool for the investigation of sliding interfaces, 161

© Elsevier Sequoia/Printed in The Netherlands

Gears
effect of Sursulf treatment on the performance of 0.14% C steel gears, 289
Graphite
preparation and tribological evaluation of Cu–graphite composites by high energy high rate powder consolidation, 117
Iron
abrasive wear resistance of anisotropic two-phase Fe–Ni–C steels, 151

Lubricant additives
organoamine and organophosphate Mo complexes as lubricant additives, 51
Lubricants
organoamine and organophosphate Mo complexes as lubricant additives, 51

Manganese
improved work-hardening ability and wear resistance of the austenitic Mn steels under non-severe impact-loading conditions, 305
Metal particles
new device for analysis of metal particles in oil, 369
Microroughness
a case of wear particle formation through shearing-off at contact spots interlocked through micro-roughness in adhesive wear, 175
Molybdenum
organoamine and organophosphate Mo complexes as lubricant additives, 51

Nickel
abrasive wear resistance of anisotropic two-phase Fe–Ni–C steels, 151
wear mechanisms in electroless Ni coatings, 125

Oils
comments on "spherical debris particles in engine oil", 383
new device for analysis of metal particles in oil, 369
reply to comments on "spherical debris particles in engine oil", 387
Organoamines
organoamine and organophosphate Mo complexes as lubricant additives, 51
Organophosphates
organoamine and organophosphate Mo complexes as lubricant additives, 51

Particles
analyses of wear rate due to micro-asperities and transferred particles on hard asperities, 337
a case of wear particle formation through shearing-off at contact spots interlocked through micro-roughness in adhesive wear, 175
comments on "spherical debris particles in engine oil", 383
new device for analysis of metal particles in oil, 369
reply to comments on "spherical debris particles in engine oil", 387
Powder consolidation
preparation and tribological evaluation of Cu–graphite composites by high energy high rate powder consolidation, 117

Rails
comparison of the wear process for eutectoid rail steels: field and laboratory tests, 233
Rollers
simulation of roller guide wear in a high temperature test rig, 81

Silicon
characterization of dry sliding wear of Al–Si alloys, 61
Silicon carbide
effect of indenter shape and surface crystallographic orientation on frictional plastic flow and fracture in $\alpha$-SiC, 75
Simulation
simulation of roller guide wear in a high temperature test rig, 81
Sliding
characterization of dry sliding wear of Al–Si alloys, 61
results for a U.K. interlaboratory project on dry sliding wear, 101
the sliding friction coefficient — its evolution and usefulness, 321
teaming measurement of the coefficient of friction and of contact resistance as a tool for the investigation of sliding interfaces, 161
Sliding wear
characterization of dry sliding wear of Al–Si alloys, 61
results for a U.K. interlaboratory project on dry sliding wear, 101

Steels
abrasive wear resistance of anisotropic two-phase Fe–Ni–C steels, 151
comparison of the wear process for eutectoid rail steels: field and laboratory tests, 233
effect of Sursulf treatment on the performance of 0.14% C steel gears, 289
improved work-hardening ability and wear resistance of the austenitic Mn steels under non-severe impact-loading conditions, 305
wear behaviour of bainitic steels, 199
Surfaces
effect of indenter shape and surface crystallographic orientation on frictional plastic flow and fracture in α-SiC, 75
Sursulf treatment
effect of Sursulf treatment on the performance of 0.14% C steel gears, 289

Tribology
preparation and tribological evaluation of Cu–graphite composites by high energy high rate powder consolidation, 117

Wear
abrasive wear resistance of anisotropic two-phase Fe–Ni–C steels, 151
analyses of wear rate due to micro-asperities and transferred particles on hard asperities, 337
a case of wear particle formation through shearing-off at contact spots interlocked through micro-roughness in adhesive wear, 175
characterization of dry sliding wear of Al–Si alloys, 61
comparison of the wear process for eutectoid rail steels: field and laboratory tests, 233
effect of normal load on the specific wear rate of fibrous composites, 1
improved work-hardening ability and wear resistance of the austenitic Mn steels under non-severe impact-loading conditions, 305
influence of non-metallic inclusions on the wear behaviour of ferrous materials in nominally dry friction systems, 353
results for a U.K. interlaboratory project on dry sliding wear, 101
simulation of roller guide wear in a high temperature test rig, 81
wear behaviour of bainitic steels, 199
wear behaviour of wood-cutting edges, 221
wear mechanisms in electroless Ni coatings, 125
Wear resistance
improved work-hardening ability and wear resistance of the austenitic Mn steels under non-severe impact-loading conditions, 305
Wood
wear behaviour of wood-cutting edges, 221
Work hardening
improved work-hardening ability and wear resistance of the austenitic Mn steels under non-severe impact-loading conditions, 305